SUBMISSION INSTRUCTIONS

Applicants must respond to each question/item in each section of the application. Incomplete applications will not be considered.

Electronic Application Process

Applicants are **required** to complete and submit the application, including all required attachments to:

hatfieldt@michigan.gov

Applications will be received on an ongoing basis and will be reviewed in the order in which they are submitted.

Applicants must respond to each question/item in each section of the application. Incomplete applications will not be considered.

Technical support will be available Monday – Friday, from 9:00 a.m. – 4:00 p.m.

All information included in the application package must be accurate. All information that is submitted is subject to verification. All applications are subject to public inspection and/or photocopying.

Contact Information

All questions related to the preferred provider application process should be directed to:

Anne Hansen
Consultant
Office of Education Improvement & Innovation

OR

Tammy Hatfield
Consultant
Office of Education Improvement & Innovation

Telephone: (517) 373-8480 or (517) 335-4733
Email: hatfieldt@michigan.gov

EXTERNAL PROVIDERS: BACKGROUND & APPROVAL PROCESS

Under the Final Requirements for School Improvements Grants, as defined under the Elementary and Secondary Education Act of 1965, as amended, Title I, Part A. Section 1003(g) and the American Recovery and Reinvestment Act as amended in January 2010, one of the criteria that the MDE (SEA) must consider when an LEA applies for a SIG grant is the extent to which the LEA has taken action to "recruit, screen, and select external providers…". To assist LEA's in this process, the MDE is requesting information/applications from entities wishing to be considered for placement on a preferred provider list that will be made available to LEA's on the MDE website. If an LEA selects a provider that is not on the list, the provider will have to go through the application review process before engaging in the turnaround intervention at the LEA. Applications will be reviewed on their merits and not on a competitive basis. Please note that the application and accompanying attachments will be accessible online to LEA's seeking to contract for educational services.

Preferred external providers will be required to participate in a state-run training program that specifies performance expectations and familiarizes providers with state legislation and regulations. External providers will be monitored and evaluated regularly and those who are not getting results will be removed from the preferred provider list.

All decisions made by the MDE are final. There is no appeal process.

Please note that being placed on the Preferred Provider List does not guarantee that a provider will be selected by an LEA to provide services.

Two or more qualified reviewers will rate the application using the scoring rubric developed by the Michigan Department of Education (MDE).

Applications will only be **reviewed** if:

1. All portions of the application are complete;

2. All application materials, including attachments, are submitted electronically prior to the due date;

Applications will only be **approved** if:

1. The above conditions are met for review;

2. The total application score meets a minimum of 70 points

Exemplar	Total Points Possible
1. Description of comprehensive improvement services	25
2. Use of scientific educational research	15
3. Job embedded professional development	15
4. Experience with state and federal requirements	15
5. Sustainability Plan	15
6. Staff Qualifications	15
Total Points Possible	**100**
Minimum Points Required for Approval	**70**

Note: Applicants may apply to become preferred providers in all or some of the program delivery areas listed in Section B. If applicant does not wish to become a provider in a program area, that should be noted on the application.

If an applicant is applying to be a preferred provider in less than the five areas listed, they must have a review score not less than the following in each area for which they apply:

Section 1 15 points
Section 2 10 points
Section 3 10 points
Section 4 10 points
Section 5 10 points
Section 6 10 points Section 6 must be completed by all applicants.

APPLICATION OVERVIEW

The Application is divided into four sections.

Section A contains basic provider information.

Section B requests information related to six exemplars (program delivery information and staff qualifications). Responses in Section B must be in narrative form. You may include figures (e.g., tables, charts, graphs) to support your narrative, but such items will be counted toward applicable page/word limits.

Section C contains the Assurances. Please read each statement carefully. By submitting your application, you certify your agreement with all statements therein.

Section D Attachments

SECTION A: BASIC PROVIDER INFORMATION

Please enter the requested information in the spaces provided. Be sure to read all notes, as they provide important information.

Instructions: Complete each section in full.

1. Federal EIN, Tax ID or Social Security Number	**2. Legal Name of Entity**
38-1949371	Project SEED, Inc.

3. Name of Entity as you would like it to appear on the Approved List

Project SEED Mathematics Professional Development & Instruction

4. Entity Type:	**5. Check the category that best describes your entity:**	
☐ For-profit	☒ Business	☐ Institution of Higher Education
☒ Non-profit	☐ Community-Based Organization	☐ School District
	☐ Educational Service Agency (e.g., RESA or ISD)	☒ Other (specify): Nationwide

6. Applicant Contact Information

Name of Contact	Phone	Fax	
Daniel J. Mulligan	313-961-8300	313-961-8307	
Street Address	**City**	**State**	**Zip**
2111 Woodward Ave, Suite 610	Detroit	MI	48201
E-Mail	**Website**		
dmulligan@projectseed.org	www.projectseed.org		

7. Local Contact Information (if different than information listed above)

Name of Contact	Phone	Fax	
Street Address	**City**	**State**	**Zip**
E-Mail	**Website**		

8. Service Area

List the intermediate school district and each individual district in which you agree to provide services. Enter "Statewide" ONLY if you agree to provide services to any district in the State of Michigan.

☒ Statewide

Intermediate School District(s):	Name(s) of District(s):

9. Conflict of Interest Disclosure

Are you or any member of your organization currently employed in any capacity by any public school district or public school academy (charter school) in Michigan, or do you serve in a decision making capacity for any public school district or public school academy in Michigan (i.e. school board member)?

☐ Yes ☒ No

What school district are you employed by or serve:_____

In what capacity are you employed or do you serve (position title):_____

Schools or school districts are encouraged to apply to become preferred providers. However, the school or school district may not become a preferred provider in its own district. This restriction does not apply to Intermediate School Districts or Regional Educational Service Authorities.

IMPORTANT NOTE: Once approved, providers must operate within the information identified in this application.

Changes in application information may be requested in writing to MDE. The request must include the rationale for the changes. All changes must receive written approval from MDE prior to implementation and will be determined on a case-by-case basis. This includes, but is not limited to, information changes in the following categories:

- Change in service area
- Change in services to be offered
- Change in method of offering services

SECTION B: PROGRAM DELIVERY AND STAFF QUALIFICATION NARRATIVES

Instructions: Section B responses must be in narrative form. Provide data/documentation of previous achievements where applicable. All responses must comply with stated page limits. Figures such as tables, charts and graphs can be included in the narrative, but such information will be counted toward page limits. Text and figures beyond the stated page limit will not be considered and should not be submitted with the application. All references must be cited.

Exemplar 1: *Description of Comprehensive Improvement Services (25 points possible)*

Describe how comprehensive improvement services that result in dramatic, documented and sustainable improvement in underperforming urban secondary schools will be delivered to LEA's that contract for your services. Comprehensive services include, but are not limited to the following:

- Support systems to ensure student and teacher success and sustain improvement
- Content and delivery systems and mechanisms proven to result in dramatic and sustained improvement linked to student achievement
- Job embedded professional development at leadership, teacher and support levels to increase internal capacity for improvement and sustainability linked to student achievement
- Comprehensive short cycle and summative assessment systems to measure performance and goal attainment linked to the building school improvement plan.

Exemplar 1 Narrative Limit: 4 pages (insert narrative here)

Project SEED is a non-profit, tax-exempt national program, founded in 1963 to raise the mathematics achievement of educationally-disadvantaged students by providing supplemental instruction in advanced mathematics along with professional development for their teachers. Numerous rigorous independent evaluations have shown that Project SEED's highly effective, interactive Socratic methodology and advanced, conceptually oriented curriculum significantly raise student achievement scores. Project SEED has been operating in Michigan since 1969.

Historically, the main goal of Project SEED has been to empower low-income and educationally-disadvantaged students to succeed in algebra and other high school mathematics courses necessary for entrance into the workforce and higher education. Project SEED's goal for teachers is to provide them—especially those that teach mathematics—with research-proven pedagogy designed to increase student engagement and achievement.

1. Support systems to ensure student and teacher success and sustain improvement

While modeling proven strategies for their teachers, Project SEED simultaneously strives to reach students at a young age, before they have concluded that math success is unattainable. Students need to believe that they are capable of mastering the challenging subjects that they will need to enter college. Parents and teachers need to believe this is possible, as well. Project SEED gives students confidence through real and potent success with highly valued subjects: namely, algebra and calculus. Classroom modeling by Project SEED Mathematics Specialists reaches not only the students, but also provides a platform for intensive professional development, allowing teachers to utilize the Socratic methodology in the presentation of their grade-level material. Seeing the students succeed at higher-level mathematics fortifies the teachers' and parents' high expectations for their students.

2. Content and delivery systems and mechanisms proven to result in dramatic and sustained improvement linked to student achievement.

Project SEED curriculum is based on topics chosen from high school and college algebra and other higher mathematics courses to reinforce and improve students' critical thinking, problem solving, and computational skills. Topics from abstract algebra, precalculus, calculus and other mathematics courses improve achievement on grade-level standards and establish the mathematical foundation for success in more advanced courses in high school and college. Although there is a common core of curriculum used in all Project SEED classes, modifications are made for each district to ensure that the instruction enhances and reinforces local and state standards and meets the needs of the individual classroom.

Project SEED maintains a year-round staff of Mathematics Specialists who are mathematicians and scientists with extensive training in the Project SEED method of interactive Socratic question-and-answer pedagogy. The methodology is designed to foster high levels of participation and understanding in students of diverse ability levels. Care is taken to balance questions that are accessible to all students with challenges for the most advanced students. Project SEED uses a spiral approach to curriculum so that students who may not completely understand a concept the first time will have repeated opportunities to view it from different perspectives, and students who master it quickly will have the opportunity to develop deeper insights. A variety of feedback and involvement strategies allow the instructor to continually monitor students' comprehension and adjust the lesson accordingly. These and other techniques also maintain students' involvement and focus and create a safe, positive learning environment.

Project SEED's Professional Development helps classroom teachers incorporate these methods into their own instruction of the core curriculum and it improves their content knowledge.

Vital to supporting students' achievement is supporting their classroom teachers. The curriculum refreshes advanced mathematics for the classroom teachers. Those teachers who have not studied this material or may not be comfortable with math, discover, through many hours of in-class observation and one-on-one coaching, that they and their students can *understand* and *do* math.

3. Job embedded professional development at leadership, teacher and support levels to increase internal capacity for improvement and sustainability linked to student achievement.

Project SEED supports school-wide improvement by providing enhanced learning opportunities for teachers, students, and their families. The goal of Project SEED services is to create a positive, student-centered environment and build a foundation for a love of learning, through the use of advanced mathematical concepts and the Group Discovery Methodology, ultimately increasing the life-options for the students.

Project SEED's services to schools include:

- Professional development for classroom teachers
- Supplemental Instruction for Students
- Family Involvement Opportunities
- Curriculum Development

Project SEED modeling and coaching takes place in school classrooms, during regular school hours, during the school year and/or summer. Project SEED classes meet at least 4 times per week. Initially, the Project SEED Mathematics Specialist teaches a majority of the lessons to model the strategies for the classroom teacher. The teacher is then encouraged to begin using the SEED strategy while being observed by the Project SEED Mathematics Specialist. Bimonthly meetings are then held for 1-on-1 coaching, constructive feedback, curriculum overview & lesson planning, and continued mentoring & support. Parents are invited to observe the SEED lessons, as well as participate in workshops and other activities. Services are coordinated and scheduled by the staff of Project SEED and schools, and are designed to support teachers, students and their parents with the following expected outcomes:

Impact on teachers: The Methodology introduced to teachers demonstrates Socratic Group Discovery Questioning and Feedback and Involvement strategies to impact the leading indicators of student learning, such as:

- Increased student engagement
- Increased student response opportunities
- Increased student time-on-task
- Increased feedback to students about learning

Impact on students: Benefits to students include:

- Increased opportunities for students to make connections among grade-level MEAP objectives
- Increased academic self-confidence
- Increased academic engagement, success, and achievement
- Early exposure to advanced mathematics (which has shown to increase the likelihood that students will take advanced level mathematics in secondary school — a prerequisite to full academic and professional access for many students)

Impact on parents: Strategies presented and demonstrated to parents include:

- Responding positively to their children and encouraging them to explain their thinking

- Starting young with fun activities, like "finger math" and skip counting
- Using household items as teaching tools (eg, playing cards, measuring cups, etc.)
- Recognizing everyday activities that can serve as learning opportunities or enrichment

4. Comprehensive short cycle and summative assessment systems to measure performance and goal attainment linked to the building school improvement plan.

Project SEED's methodology includes a number of techniques for daily assessment of students' comprehension of the material presented. Some of the techniques, like silent agreement and disagreement signals, "why" and "how" questions and paper problems give real-time feedback to the Project SEED Mathematics Specialist and allow him or her to adjust the lesson plan 'on the fly', as it might be, to back-up a bit and review or to push ahead. Other Project SEED assessment techniques include periodic written answers to problems in a format called a "fun sheet," which will be reviewed by the classroom teacher, the SEED Specialist, and SEED management staff.

Project SEED works closely with school administrators and staff to plan and provide services that address the needs of students and teachers in the school district. Each Mathematics Specialist meets regularly with classroom teachers to provide coaching, review curriculum & data, discuss issues related to students, receive feedback and strategize to meet the needs of the students. Project SEED invites all stakeholders to observe the model lessons and participate in workshops. Our services are routinely evaluated by the principals and teachers with whom we work using questionnaires, and through comment sheets given to parents and other visitors who observe the SEED classes. In recent evaluations of the Detroit Project SEED classes, principals, teachers, and parents reported student benefits such as: improved student performance in their regular mathematics program (teachers also noticed improved student performance in other subject areas); improved listening skills; improved critical thinking and problem solving skills; increased motivation to learn; and increased student academic self-confidence and self-esteem. Teachers consistently report that their teaching effectiveness is enhanced when they use the techniques and instructional strategies that were presented in Project SEED workshops and modeled in their classrooms.

Classes that receive Project SEED instruction for a minimum of ten weeks are given pre- and post-assessments to assess achievement growth.

Project SEED also provides each school with a comprehensive program review at the end of the school year, including feedback from parents, staff and administrators.

Exemplar 2: *Use of Scientific Educational Research*
(15 points possible)

Describe how scientific educational research and evidence based practices will be used as the basis for all content and delivery systems and services provided to the LEA.

- The applicant should provide detailed data that supports successful performance in utilizing research and evidence-based practices in the delivery of systems and services, especially as applied to secondary school settings.
- Cite and reference available research studies (as appropriate) and **provide data** that indicate the practices used have a positive impact on the academic achievement of students in the subjects and grade levels in which you intend to provide services.

Exemplar 2 Narrative Limit: 3 pages (insert narrative here)

The positive results from Project SEED's partnerships with school districts in Michigan and around the country over five decades have been well documented in studies conducted in collaboration with school districts and independent evaluators. These studies have shown that SEED students enroll in more advanced mathematics courses, repeat grades less often than non-SEED students, score significantly higher on nationally-normed mathematics tests, experience cumulative gains with each additional term of SEED, and maintain their achievement margin after Project SEED instruction has ended. Based on its evaluation results, Project SEED was awarded Developer Demonstrator status in 1994 by the U.S. Department of Education Program Effectiveness Panel. More recently, in April 2004 Project SEED was one of two out of 200 mathematics and science intervention programs to receive the top rating given in the report to the U.S. Congress by the BEST (Building Engineering and Science Talent) Blue Ribbon Panel on Pre-K-12 Education and AIR (the American Institutes for Research).

In particular, independent evaluations in Detroit have shown a positive impact of Project SEED instruction on **MEAP** scores. From the Executive Summary, **Evaluation of Project SEED, 1997-2000**, Detroit Public Schools:

> One semester of enrollment in SEED (at least 14 weeks) was associated with **increased mathematics overall performance scores on the Michigan Educational Assessment Program (MEAP).** Posttest scores (1999 MEAP Scores) were adjusted through a covariance model that included 1997 MAT Reading Comprehension score, 1997 MAT Math Total score, ethnicity, lunch status, gender, and SEED status. Adjusted posttest mathematics scale score means were **530.03** for the Comparison group, **542.84** for the group that had one semester of SEED in 1997-98, and **547.36** for the group that had two semesters of SEED. The group that had one semester of SEED in 1998-99 produced an adjusted mean of 570.94 based on a very small sample. An ordinal logistic regression analysis on Math Overall Performance also produced statistically significant results in favor of SEED.
>
> Looking at the results differently, **89.4%** of SEED students passed the mathematics part of the MEAP while only **79.2%** of the Comparison group passed. 506 students had data on the mathematics measures.
>
> **Up to one and one-half years** [the longest interval studied] **after exposure** to one semester of SEED, former **SEED students were further ahead** of comparisons than they were at the conclusion of SEED instruction. Adjusted posttest means were **434.79** on Math Procedures for the Comparison group and **497.85** for the SEED group, **385.15** on Math Concepts/Problem Solving for the Comparison group and **482.55** for the SEED group. The number of SEED students was 191.

Project SEED's methods conform to those identified by Joyce and Weil[1] as effective ways for teachers to learn new methods, including observing demonstrations given by those familiar with the strategy. Reassurance at the beginning and encouragement to implement new methods, gradually, are also key in their eyes and in the Project SEED model, where positive reinforcement is a continual tool for students and for teachers.

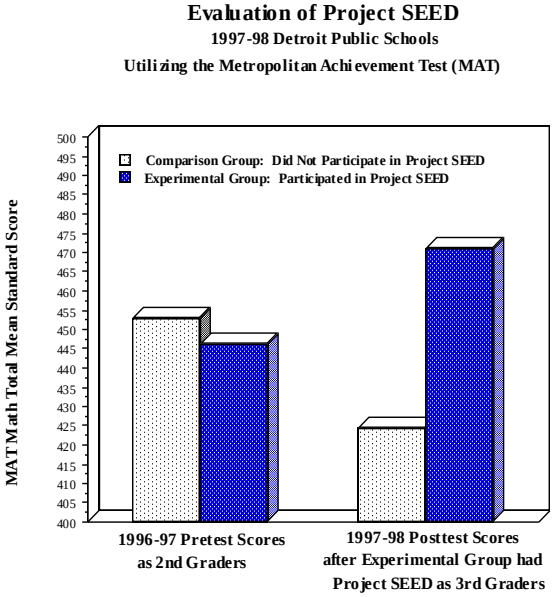
Joyce and Showers[2] found that coaching in the classroom after workshops was 80-90% effective at enabling teachers to use and apply methods in the classroom. Theory and modeling in

[1] Joyce, Bruce and Marsha Weil, *Models of Teaching*, Prentice Hall, Inc. Englewood Cliffs, 1986.

[2] Joyce, Bruce R. and Beverly Showers, "Student Achievement Through Staff Development," *Educational Leadership*. Vol. 46, November 1988.

workshops, alone, were only 5-10% effective. Word and Thompson[3] state, "Transfer of learning into practice requires follow-up assistance, coaching and helpful supervision." Project SEED's standard service package offers classroom teachers more than 45 hours of modeling and coaching, including lesson planning assistance, observation and feedback.

- **Compton 2009-10:** All Compton 6th grade students were tested with the *California Standards Test (CST)* in the Spring of 2008, 2009, and 2010. [The Spring 2008 and 2009 scores were used for comparison for students who had Project SEED instruction in 2009-2010.] 843 Compton 6th grade students were also tested with a test of Algebraic Concepts in 2009-2010. Those students who were exposed to the prescribed Project SEED program outscored all comparison students on both the *California Standards Test (CST)* and the test of Algebraic Concepts. Specifically:
  - Students who had the full SEED treatment outperformed every comparison group by a large margin on scale scores on the CST *(366.88 to 304.75 and 321.13).*
  - If the scale scores are indeed comparable from year to year, overall achievement in the District is improving, particularly in mathematics (From 305.83 in 2008 to 310.64 in 2009 to 319.17 in 2010).
  - When analyzing *CST* scale scores from the same students over a three year period, the full SEED treatment group significantly outperformed the comparison groups on all analyses.
  - Students who had the full SEED treatment also significantly outperformed a comparison group on the test of Algebraic Concepts and Compton student algebra results compared favorably to those from five other districts in a national study of Project SEED.
- **Detroit 1997-00:** Despite the fact that the comparison group started higher, SEED students outscored comparison students on all three measures of mathematics achievement as tested by the Metropolitan Achievement Test (MAT). The SEED group outscored the comparison group by over 50 points on the MAT Math Total Mean Standard Score.



SEED students also performed better on the Michigan Educational Assessment Program (MEAP). The evaluators stated, ***"Taking all of the standardized test data into account, it seems obvious that participation in SEED instruction contributes to substantially***

[3]Word, Fred and Steven R. Thompson, "Assumptions about Staff Development Based on Research and Best Practice." *Journal of Staff Development*, Vol. 14, No. 4, Fall 1993.

increased mathematics test scores." As part of this 3-year study, an evaluation of Student Algebraic Achievement during 1997-98 found a highly statistically significant difference between SEED and comparison students, concluding that, ***"Clearly SEED students are learning algebraic concepts while comparison students are scoring below chance."*** This evaluation was part of a national study of Project SEED. Similar results were found in other SEED cities (Camden, Dallas, Richmond (CA) and Indianapolis)

- **Detroit 1997-00:** A multi-year **survey of SEED alumni** (now high-school age or older) revealed that **99%** of those responding have **taken algebra, geometry, and other high level math** classes in high school, **95%** are attending or plan to **attend college**, and **over 50%** of those attending, or planning to attend **college, anticipate majoring in a mathematics/science** related field.
- **Detroit 1991-94: SEED students significantly outscored a matched comparison group on the CAT** (California Achievement Test). Adjusted mean differences were on the order of 15 NCEs (Normal Curve Equivalents).
- **Pennsylvania 1992:** Dr. Glenn Latham, Pennsylvania Department of Education, evaluated **Project SEED's instructional methodology** and found high rates of student response opportunities, high rates of positive teacher-to-pupil interactions, an extremely high ratio of positive teacher interaction to student response opportunities (30% for SEED classes vs. typical rate of 3%), and high levels of on-task behavior (95% for SEED classes vs. a typical rate of 43%).
- **Dallas 1991-93: SEED students demonstrated increased mathematics achievement** levels as well as improved mathematics achievement **up to four years after exposure to Project SEED.**
- **The Evaluation of Project SEED, 1990-91.** William J. Webster and Russell A. Chadbourn, EPSN91-043-2, Dallas Independent School District, 1992 (extended in 1993)

Longitudinal studies of over five thousand students of the Dallas Independent School District (Webster and Chadbourn, 1992) found that:

- There is an **immediate impact of one semester of SEED instruction** on mathematics as measured by the ITBS. **This impact ranged as high as 1.48 years but generally was in the area of three to four months.**
- There is **a cumulative impact of more than one semester of SEED instruction** on mathematics achievement as measured by the ITBS. That is, the more semesters of SEED instruction that children are exposed to (up to three) the greater the difference in mathematics achievement between SEED students and their matched comparisons.
- **Retention of mathematics skills** by former SEED students is still present **five years after** SEED instruction. That is, five years after completing their last of three semesters of SEED, (one semester each in the fourth, fifth, and sixth grades), former SEED students now in the eleventh grade still significantly outperform their matched comparisons in mathematics as measured by the Tests of Achievement and Proficiency (TAP) and Norm-Referenced Achievement Program for Texas (NAPT).
- **Former SEED students enroll in significantly more higher level mathematics courses** than do their matched comparisons in middle and high school.

Note: The Detroit 1991-1994 and the 1997-2000 national studies also included surveys of parents, teachers, and principals all of whom rated SEED very highly. Student surveys conducted in the 1997-2000 studies also showed that **over 90% of the students felt their mathematics abilities were stronger** and that they **liked mathematics more because of their experiences with Project SEED.**

Exemplar 3: *Job Embedded Professional Development*
(15 points possible)

Describe how a job-embedded professional development plan will be put in place to support principals, school leadership teams, teachers, and support staff.

- The applicant should provide detailed data that supports successful performance in developing job-embedded professional development plans for:
  - principals
  - school leadership teams
  - teachers
  - support staff

Exemplar 3 Narrative Limit: 2 pages (insert narrative here).

Project SEED's job-embedded professional development model is introduced to schools via a collaborative process of on-site training and support, and continues throughout the academic year. Activities include intensive modeling & coaching for identified teachers ("pilot teachers") and assistance provided to principals, school leadership team, other teachers and support staff. Project SEED instruction will take place in pilot teachers' classrooms, during regular school hours, during the school year and/or summer. Services will be coordinated and scheduled by the staff of Project SEED and each school, with opportunities extended to principals, school leadership team, other teachers, support staff, and parents to observe instruction. Although Project SEED can customize its services per school, the following is an example of how a job-embedded professional development plan could be implemented over three years:

Example: Designed as a "Train the Trainers" model, Project SEED will work intensively and progressively with a group of pilot teachers for up to three years, with the goal of preparing teachers to train others to use SEED pedagogy to teach mathematics more effectively.

During Year 1, up to α pilot teachers will be selected as "Group Alpha," to receive the intensive on-going training in the first year, and will participate as described in the following chart.

Services	Year 1	Year 2	Year 3
For Pilot Teachers: *intensive on-going training* • daily classroom modeling of advanced mathematics to students -critical thinking/problem solving -academic confidence -mathematics discourse • 1-on-1 coaching -constructive feedback -effective lesson planning • specialist observations • small group meetings • grade-level meetings • mathematics resource • continued mentoring & support • whole staff workshops	Group Alpha: Advanced Mathematics Instruction for X classes for 10-12 weeks Intensive Training for up to α Teachers	Group Beta: Advanced Mathematics Instruction for Y classes for 10-12 weeks Intensive Training for up to ß Teachers + α Teachers receive 1 week of coaching and modeling with students	Group Gamma: Advanced Mathematics Instruction for Z classes for 10-12 weeks Intensive Training for up to γ Teachers in Year 3 (Group Gamma) + ß Teachers receive 1 week of coaching and modeling with students + α Teachers receive 1 week of coaching and modeling with students & assist with training
Support for Others: • Up to 2 weeks of in-class modeling • observation of SEED model teaching • small group meetings • mathematics resource • whole staff workshops	Principals, school leadership team, teachers & support staff	Principals, school leadership team, teachers & support staff	Principals, school leadership team, teachers & support staff
Family Involvement Activities: • Parent Group demonstrations • Parent seminars • Gala Celebration	All eligible parents	All eligible parents	All eligible parents

Services will be provided by a team of Project SEED Mathematics Specialists— mathematicians, scientists, and engineers who are highly trained as master teachers.

The pilot teachers, along with the rest of the school staff, will have opportunities to observe in-class modeling, attend small group and/or grade-level meetings, and attend professional development workshops. Additionally, Mathematics Specialists will work to engage Parents and Family Members through observation of SEED instruction, workshops and presentations, as well as invite them to attend a Gala Celebration and Awards Ceremony.

During Year 2, a second cohort of up to ***ß*** teachers will be selected as "Group Beta," to receive the intensive on-going training. These teachers will participate as described previously. Other staff and family members will participate as in Year 1. Additionally, "Group Alpha" teachers will receive 1 week of modeling and coaching in their classrooms during Year 2 to serve as a review of strategies from Year 1. Similar activities will comprise Year 3, during which time "Group Alpha" teachers will assist with training activities.

Results from routine surveys of teachers and administrators consistently reflect the many benefits of Project SEED's job-embedded professional development model:

- *100% of teachers & administrators believe Project SEED uses extremely or very effective teaching methods, providing teachers with new and insightful ways of teaching*
- ***Nearly 70% of teachers stated that Project SEED teaching significantly strengthened their own understanding of mathematics***
- *100% reported a high-degree of student enthusiasm and participation during Project SEED lessons*
- *Over 95% report the Project SEED experience substantially builds student self-confidence, motivates students to learn, stimulates student interest in math, and helps to improve students' critical thinking and problem solving skills*
- *100% of teachers noted improved student performance in the regular math program; nearly 70% noted significant improvement*

Two additional comments from teachers exemplify the typical response to Project SEED's job-embedded professional development model:

> *The best professional development I have ever attended in 22 years as a teacher.*
>
> *My thoughts on teaching math and other subjects have been changed. After this session I cannot wait to get into my classroom and start w/ signals and questions day 1! Thank you!*

Among the plethora of comments Project SEED has received during its history:

> *The success of the children in Project SEED is important, but what may be even more important is that there is an articulated routine for preparing teachers to become successful, and that with this preparation they do become successful.*
>
> - Asa G. Hilliard III, Fuller E. Callaway professor of Urban Education, Georgia State University

Exemplar 4: *Experience with State and Federal Requirements* **(15 points possible)**

Describe your experience with State and Federal Requirements, especially as it relates to the following:

- Aligning model(s) to be implemented with the School Improvement Framework
- The Michigan Comprehensive Needs Assessment
- Individual School/District Improvement Plans, North Central Association (NCA)
    - Response demonstrates alignment of the above mentioned elements, AKA "One Common Voice - One Plan."
- Understanding of Title 1 (differences between Targeted Assistance and School-wide)
- State assessments — Michigan Educational Assessment Program (MEAP) and the Michigan Merit Exam (MME)
- Michigan Grade Level Content Expectations (GLCEs)
- Michigan High School Content Expectations (HSCEs)
- Michigan Merit Curriculum
- Michigan Curriculum Framework
- Section 504 of the Individuals with Disabilities Education Act (IDEA)

Exemplar 4 Narrative Limit: 2 pages (insert narrative here)

For nearly five decades, Project SEED has assisted schools and districts across the country, improving instruction and student achievement—especially in mathematics—via Title I, Title II, Federal ESAA and ESEA Title III funding, to help them meet state and federal requirements for school improvement.

Aligning model(s) to be implemented with the School Improvement Framework

Project SEED's Professional Development & Instruction Model offers the following within each strand of the Michigan School Improvement Framework:

STRAND 1 - Teaching for Learning: Project SEED pedagogy is based on effective means for improving achievement of participating children and uses scientifically-based instructional strategies to strengthen core academics—Project SEED has well-documented its research-based best practices which have resulted in success by children of diverse backgrounds

STRAND 2 - Leadership: The leadership model embedded in Project SEED's three-year plan to "Train the Trainers" provides opportunities for pilot teachers to assume academic leadership roles within their schools.

STRAND 3 - Personnel and Professional Development: The Project SEED Professional Development & Instruction Model employs research-based best practices, empowering teachers with a multitude of instructional strategies to increase student participation, focus and feedback.

STRAND 4 - School and Community Relations: Project SEED actively involves parents and family members through opportunities to attend workshops and other events, as well as observe SEED instruction.

STRAND 5 - Data and Information Management: Project SEED staff's mathematical background—we are degreed mathematicians and scientists—along with our lengthy history, provide schools with unique assistance in analyzing data in relation to student achievement.

The Michigan Comprehensive Needs Assessment
Individual School/District Improvement Plans, North Central Association (NCA)
State Assessments — Michigan Educational Assessment Program (MEAP)
Michigan Curriculum Framework

For decades, Michigan school districts have encouraged their administrators to utilize Project SEED services based on assessment of K-8 evaluation data from the Michigan Comprehensive Needs Assessment, District and School Improvement Plans, Michigan Educational Assessment Program (MEAP), and other such indicators, especially in the high-priority area of mathematics achievement, in support of their "One Common Voice – One Plan" process. Project SEED's staff is well-versed in the Michigan Grade Level Content Expectations (GLCEs) and Common Core State Standards (CCSS), and will work collaboratively with participating administrators and teachers to identify topics for which their students need support, embedding concepts into the advanced mathematics curriculum continuously. Project SEED works primarily with students in grades 3 through 8.

Project SEED also meets the required elements of the US Department of Education's School Improvement Grant (SIG) Transformational Model for Tier I and Tier II schools, as the following examples illustrate:

1. Develop and increase teacher and school leader effectiveness

The leadership model embedded in our three-year plan to "Train the Trainers" provides opportunities for pilot teachers to assume academic leadership roles within their schools.

2. Implement comprehensive instructional reform strategies

The Project SEED Professional Development & Instruction Model employs research-based best practices, empowering teachers with a multitude of instructional strategies to increase student participation, focus and feedback.

3. Increase learning time

Project SEED's instructional method, combined with our improved question-asking strategies, results in more efficient use of instruction time.

Understanding of Title I:

Many districts around the country use Title I School-wide funds to purchase and implement our programs as these funds can provide services to all students in a building. We are well aware that Title I Targeted Assistance funds may only be used to purchase programs, materials, and services to benefit eligible students. Project SEED meets a number of the objectives for these funds, including:

- Use all Title I, Part A funds to promote academic achievement standards in eligible students—Project SEED has a long history of success with Title 1 students
- Incorporate Title I, Part A planning into the School Improvement Plan—many schools incorporate Project SEED services into their SIP
- Be based on effective means for improving achievement of participating children and use scientifically-based instructional strategies to strengthen core academics—Project SEED has well-documented its research-based best practices which have resulted in success by children of diverse backgrounds
- Provide accelerated, high quality curricula—Project SEED introduces students to advanced mathematical concepts, namely algebra, geometry, and pre-calculus, empowering students with a foundation for success in more advanced courses
- Minimize pull-out programs—Project SEED works with full-size intact classes
- Coordinate and support the regular education program—accomplished via regular meetings with teachers and administrators
- Provide instruction by highly-qualified and trained professional staff—Project SEED staff are mathematicians and scientists who are highly trained master teachers using the SEED pedagogy
- Implement strategies to increase parental involvement—Project SEED actively involves parents and family members through opportunities to attend workshops and other events, as well as observe SEED instruction.

Project SEED Mathematics Specialists will also be a resource for teachers, able to provide background and depth to the mathematical concepts the teachers are responsible for per grade level and beyond. Project SEED curricula, aligned to these standards, is based on topics chosen from high school and college algebra and other higher mathematics courses to reinforce and improve students' critical thinking, problem solving, and computational skills. Although there is a common core of curriculum used in all Project SEED classes, modifications are made for each class and district to ensure that the instruction enhances and reinforces local and state standards.

Exemplar 5: ***Sustainability Plan***
(15 points possible)

Describe how a sustainability plan will be put in place for the building to become self-sufficient at the end of the 3-year grant period.

- The applicant should demonstrate significant knowledge and experience in developing sustainability plans.

Exemplar 5 Narrative Limit: *2 pages (insert narrative here)*

The Project SEED Professional Development & Instruction services described above are designed to be a "Train the Trainers" model to take place over three academic years, providing a level of self-sustainability at the end of the 3-year grant period. This plan underscores the importance of building capacity—in participants' content knowledge and methodology—to sustain school improvements.

As designed in this model, pilot teachers should meet certain criteria, including:

- Likely to adopt Project SEED's effective techniques and strategies
- Respected by colleagues—already are or have potential to become teacher leaders
- Likely to remain within the school or district
- Have a more self-managed style discipline with students

In the example described above, during the first year, Group Alpha pilot teachers will receive 10-12 weeks of intensive ongoing modeling and coaching, culminating in opportunities for practicum and expert feedback & support. In subsequent years, Group Alpha pilot teachers will receive additional weeks of modeling and coaching to "refresh" them in our pedagogy. In year three, Group Alpha pilot teachers will be able to assist with training of other staff in the building.

In addition to working with pilot teachers, Project SEED will offer workshops and demonstration lessons to all teachers. These activities will help identify subsequent cohorts of teachers to participate as Group Beta and Group Gamma pilot teachers in years two and three.

Exemplar 6: ***Staff Qualifications***
(15 points possible)

Provide names and a brief summary of qualifications for the primary staff who will be involved in providing services to LEA's. Provide criteria for selection of additional staff that are projected to be working with LEA's. Include vitae of primary staff.

- Staff qualifications and vitae should match with areas that the applicant wishes to serve. Staff should have extensive experience in implementation of all applicable areas.

Exemplar 6 Narrative Limit: 1 page plus vitae for personnel (insert narrative and vitae here)

Project SEED employs mathematicians—with a minimum of a bachelor's degree in mathematics or the equivalent—highly trained as master teachers, who use a unique Socratic method of instruction to teach advanced, conceptual mathematics to entire classes of at-risk and low-achieving students in grades 3 – 8, as a supplement to their regular program.

Primary Staff's responsibilities, roles, education, and experience: Responsible for managing local program, coordinating with district officials, training and development of staff, and planning and teaching advanced mathematics to elementary and middle school students while modeling & providing coaching in Project SEED's Discovery Methodology, conducting additional professional development activities for teachers (1-on-1 meetings, grade level sessions, workshops, etc.), conducting parent presentations and seminars, and other duties.

Daniel Mulligan, Director/Mathematics Specialist; BA Mathematics, Beloit College
Years with Project SEED: 21

Cheryl Phillips, Supervisor/Mathematics Specialist; BA Mathematics, Lake Forest College, MS Management, Trenton State College
Years with Project SEED: 12

Mathematics Specialists: Responsible for planning & teaching advanced mathematics to elementary and middle school students while modeling & providing coaching in Project SEED's Discovery Methodology, conducting additional professional development activities for teachers (1-on-1 meetings, grade level sessions, workshops, etc.), conducting parent presentations & seminars, and other duties.

Project SEED's Michigan staff—with an average experience of 7.5 years with Project SEED—also benefit from the resources and expertise of the national Project SEED organization. For example, several Mathematics Specialists with over 20 years experience have recently realigned Project SEED curricula to support the Common Core State Standards when they are introduced at the classroom level.

Staff Training

Project SEED provides its mathematics specialists with intensive initial and ongoing training in its Group Discovery Pedagogy, consisting of: modeling and coaching in our instructional strategies, philosophy of education, advanced mathematics curriculum sequences, appropriate use of techniques, classroom management strategies, embedding Grade Level Content Expectations & Common Core State Standards into the algebra, etc. This training continues throughout staff members' careers, as SEED mathematics specialists meet several times per week to conduct on-going training & development workshops. Additionally, SEED mathematics specialists observe and critique each other on a regular basis to maintain program excellence.

Project SEED anticipates adding additional mathematics specialists with comparable qualifications as needed. It is likely that a majority of these staff members will relocate from one or more of our other program sites and will have 3 or more years of experience.

Daniel J. Mulligan

dj.mulligan@comcast.net

Professional Experience

Project SEED, Inc., Detroit and Pontiac, MI 1990-Present

Director & Mathematics Specialist

Responsible for overseeing the overall operation of the local program of a national, non-profit organization which teaches advanced mathematics to regular, full-sized classes of elementary and middle school "at-risk" students, while simultaneously providing professional development to teachers. Specific responsibilities include:

- Collaborating with national director and other directors to set goals and objectives for the national program
- Working with Pontiac, Detroit, and other local public school districts, governments and businesses to fund and implement the Project SEED services
- Planning yearly budgets, staffing, and schedule of services to local school districts
- Managing a staff of SEED mathematics specialists in all aspects of their duties
- Fundraising and proposal writing for both government and private funding sources
- Teaching algebra, analytic geometry, and calculus daily to 3rd – 8th graders in the local public schools
- Designing, coordinating, and implementing the initial and on-going training of SEED mathematics specialists in Project SEED's Discovery Methodology, a Socratic approach to teaching
- Curriculum development and training
- Developing, coordinating, and implementing professional development activities for district teachers
- Designing, purchasing, and maintaining a Macintosh computer network for office management
- Designing, programming, and maintaining an integrated relational database to manage information
- All aspects of video production to produce promotional and instructional video tapes and DVDs

Detroit Job Corps Center, C.S.D., Detroit, MI 1989-1990

Mathematics Instructor

Taught mathematics course by creating and maintaining individualized instruction for students age 16 – 21 who were working to complete their G.E.D.

St. Ambrose Academy, Detroit, MI 1989

Teacher

Taught math, science, and reading to 6th, 7th, and 8th graders; also coached 4th – 8th grade track.

Boylan Central Catholic High School, Rockford, IL 1987-1988

Mathematics Teacher / Coach

Taught all levels of algebra, including honors courses, to 9th – 12th graders; also was assistant coach for football and basketball at the sophomore and freshmen levels.

Horsforth High School, near Leeds, England 1986

Student Teacher

Taught various levels of mathematics, for ages 11 through 16, within the British School System.

Education

Bachelors of Arts in Mathematics – **Beloit College**, 1986
Concentration in Secondary Education

Notable Recent Presentations

2011: Lead Trainer, Professional Development Summer Institute for Teachers, Baltimore County Public Schools, Baltimore, MD

2006: Plenary Speaker, Annual Meeting of the Michigan Section of the Mathematical Association of America, Grand Rapids, MI

CHERYL D. PHILLIPS phillipszoe2003@yahoo.com

PROFESSIONAL EXPERIENCE

Project SEED, Inc., Detroit, Michigan **1/99 to Present**
Mathematics Specialist and Supervisor

- Instruct regular, full-sized third through seventh grade classes in topics from algebra and group theory to summations and calculus in fourteen-week sessions. Develop customized lesson plans and create feedback media to measure learning.
- Supervise four other Mathematics Specialists. Meet periodically with team individually and as a group to review goals, teaching issues and review performance and attendance reports. Conduct annual performance evaluations.
- Serve on the Leadership Committee for the Detroit Office. Advise the Director on personnel, policy and business issues; perform long term planning; etc.
- Participate in hiring activities. Interview candidates and provide input regarding suitability of candidates for specific positions within the organization.
- Lead the Scheduling Committee, which markets the program to principals and school administrators; meet with potential clients; give presentations to administrators, parent groups and teaching staff on the program; provide professional development training to educators at their schools and at industry conventions.

Concordia College, Ann Arbor, Michigan **6/95 to 6/98 (Part-Time)**
Adjunct Instructor

- Taught statistics to students in the accelerated degree completion program.

SBC Ameritech/Michigan Bell, Detroit, Michigan **1975-12/94**

- Director of Pricing, Ameritech Michigan (1987-1994)
  Staffed and led team of managers who developed pricing strategies, determined the legal, technical and operational feasibility of service and pricing plans. Designed plans and conducted appropriate analyses to insure that the prices and services provided for long term revenue growth, met customer needs, accommodated regulatory constraints and were viable in the market place. Served as a pricing proposal and revenue impact witness for the Company in rate filings before the Michigan Public Service Commission as needed. Led interdepartmental implementation teams of up to 100 managers to implement rate filings, including addressing of all technical and customer issues.
- District Manager AT&T and Bell Communications Research (1982-1987)
- Manager, Associate District Manager, Michigan Bell (1975-1982)

EDUCATION

B.A. Mathematics, Lake Forest College, Lake Forest Illinois
M.S. Management, Trenton State College, Hillwood Lakes, New Jersey
Completed formal and informal training in leadership, marketing, business management, market research, customer satisfaction measurement and sales, including Tom Hopkins' Sales Training Institute. Adept at using Microsoft Word, Excel, etc.

OTHER PROFESSIONAL AFFILIATIONS

Licensed securities broker by the Financial Industry National Regulatory Authority (FINRA)

SECTION C: ASSURANCES

The applicant entity:

1. will follow all applicable legislation and guidance governing the Section 1003(g) school improvement grants.

2. will follow all applicable Federal, state, and local health, safety, employment, and civil rights laws at all times.

3. will comply with the MDE Standards for Monitoring Section 1003(g) School Improvement Grants Preferred External Education Services Providers.

4. agrees to make all documents available to the MDE or LEA for inspection/monitoring purposes, and participate in site visits at the request of the MDE, the district, or facilitators/monitors for the SIG grant.

5. agrees to notify MDE and applicable district(s), in writing, of any change in the contact information provided in this application within ten business days.

6. ensures that it will provide written notification to MDE, when external preferred provider services will no longer be provided, thirty days prior to termination of services.

7. assures that they have accurately and completely described services they will provide to the LEA.

8. assures they will comply with SEA and LEA requirements and procedures.

SECTION D: ATTACHMENTS

- **Licensure:** Applicants must attach a copy of their business license or formal documentation of legal status with respect to conducting business in Michigan (e.g., certificate of incorporation, proof of 501(c)(3) tax-exempt status). Schools, school districts, and ISDs/RESAs may substitute documents that include address/contact information and the appropriate building or district code as found in the Educational Entity Master (EEM).

- **Insurance:** Applicants must provide a proof of their liability insurance or a quote from an insurance agency that reflects the intent to obtain general and/or professional liability insurance coverage.